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CLAIMS

5 1. A network hub in a communication network comprising a server, the server pushing status information to a client.

2. The network hub of claim 1, wherein the server unicasts the information.

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3. The network hub of claim 1, wherein the server transmits the information to a plurality of clients.

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4. The network hub of claim 1, wherein the server broadcasts the information.

5. The network hub of claim 1, wherein the server multicasts the information.

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6. The network hub of claim 1, wherein the hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof.

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7. The network hub of claim 6, wherein the network hub comprises one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof.

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8. The network hub of claim 1, wherein the hub is devoid of a microprocessor.

9. The network hub of claim 1, wherein the information comprises a predefined status field.

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10. The network hub of 9, wherein the predefined status field comprises a push transmission field.

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11. The network hub of claim 6, further comprising a plurality of ports.

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12. The network hub of claim 11, wherein the operational information comprises a predefined status field.

10 13. The network hub of claim 12, wherein the predefined status field corresponds to at least one of the plurality of ports.

14. The network hub of claim 1, further comprising memory register for storing the information therein.

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15. The network hub of claim 1, wherein the information is a management information base (MIB) statistic.

20 16. The network hub of claim 1 further comprising a MIB engine.

17. The network hub of claim 16 further comprising a switching fabric and a transceiver (PHY) integrally contained therein.

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18. The network hub of claim 17 further comprises an address resolution table integrally contained therein.

30 19. The network hub of claim 15 further comprising a MIB engine.

20. The network hub of claim 9 further comprising a MIB engine for pushing the predefined status field.

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21. A communication apparatus, comprising:

- 5 a. a network information table storing network information from the network information receiver; and
- b. a network information transmitter selectively push transmitting the network information in the network information table.

10 22. The communication apparatus of 21, further comprising at least one of:

- a. a network information receiver, operably coupled with a communication network and the network information table, receiving network information; and
- 15 b. a network operations analyzer analyzing the networking information in the network information table and producing information of a state of the network.

20 23. The communication apparatus of 22, comprising a hub, a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof.

24. The communication apparatus of claim 21, comprising a plurality of ports coupled to the network information transmitter.

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25. The communication apparatus of claim 23, comprising one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof.

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26. The communication apparatus of claim 24, comprising one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof.

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27. The communication apparatus of claim 26, wherein the plurality of ports comprises four ports.

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28. The communication apparatus of claim 26, wherein the plurality of ports comprises eight ports.

29. The communications apparatus of claim 21, further comprising a PHY and a switching interface, each of the network information receiver, the network information table, and the at least one of the network information transmitter and the network information detector being integrated into the network hub.

30. The communication apparatus of 29, wherein the network hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof.

31. A communication apparatus, comprising:

a. a network information receiver, operably coupled with a communication network, for receiving network information;

b. a network information table for storing network information from the network information receiver;

c. a network operations detector detecting the networking information and producing operational information of an operational state of the network; and

d. a network information transmitter, for transmitting the operational information of an operational state of the network.

32. The communication apparatus of 31, further comprising a network hub.

33. The communication apparatus of 32, wherein the hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof.

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34. The communication apparatus of claim 33, comprising a plurality of ports.

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35. The communication apparatus of claim 33, comprising one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof.

10 36. The communication apparatus of claim 34, comprising one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof.

15 37. The communication apparatus of claim 36, wherein the plurality of ports comprises four ports.

38. The communication apparatus of claim 36, wherein the plurality of ports comprises eight ports.

20 39. The communications apparatus of claim 32, further comprising a transceiver (PHY) and a switching fabric, each of the network information receiver, the network information table, and the at least one of the network information transmitter and the network information detector being integrated into the
25 network hub.

40. The communication apparatus of 39, wherein the network hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof.

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